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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,314	02/27/2004	Ryan Mitchell Bayne	13210-39	4335
1059	7590	05/09/2006	EXAMINER	
BERESKIN AND PARR 40 KING STREET WEST BOX 401 TORONTO, ON M5H 3Y2 CANADA			TIBBITS, PIA FLORENCE	
			ART UNIT	PAPER NUMBER
			2838	
DATE MAILED: 05/09/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

3/

# Office Action Summary

Application No.

10/787,314

Applicant(s)

BAYNE ET AL.

Examiner

Pia F. Tibbits

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2 and 14 is/are allowed.
- 6) ☒ Claim(s) 4,7,9-12,15 and 16 is/are rejected.
- 7) ☒ Claim(s) 5,6,8 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

This Office action is in answer to the amendment filed 3/31/2006. Claims 1, 2, 4-16 are pending, of which claims 1, 5 are amended, and claims 7-16 are added.

#### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the measurement unit to measure voltage differences must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 4, 7, 9-12, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ramsden** [6445159].

As to claim 1, Ramsden discloses a charger comprising: a single current source 608; two or more separate charging ports [see fig.6]; a current allocator 601 to allocate charging currents from said single current source to said two or more ports; and a controller 601 to determine said charging currents so that two or more rechargeable batteries coupled respectively to said two or more ports will be fully charged at substantially the same time [see abstract]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make separable current allocator and the controller in order to miniaturize elements, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). See MPEP 2144.04.

As to claims 4, 7, 9, 15, see remarks and reference above.

As to the method claims 10-12, 16: the method steps will be met during the normal operation of the apparatus described above.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Allowable Subject Matter***

5. Claims 1, 2, 14 are allowed.

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As to claim 1: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a method of charging two or more rechargeable batteries from a single current source by use of two or more separate charging ports, the method comprising, *inter alia*, determining a charging current to be allocated to each charging port at least in part on an average current drain during usage of the rechargeable battery coupled to the respective charging port.

6. Claims 5, 6, 8, 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 5: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a charger comprising, *inter alia*, wherein said controller is to determine from one or more lookup tables an amount of charge required to fully charge a battery based on measured voltage differences, a battery type of the respective battery, and an average current drain of each battery during usage.

As to claim 6: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a charger comprising, *inter alia*, wherein said controller is to determine from one or more lookup tables an amount of charge required to fully charge said particular battery based on said received voltage, a battery type, and an average current drain of said particular battery during usage.

As to claim 8: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a charger comprising, *inter alia*, one or more lookup tables an amount of charge required to fully charge said particular battery based on said received voltage, a battery type, and an average current drain of said particular battery during usage.

As to claim 13: none of the references of record prior to applicant's filing date discloses, teaches, or suggests a method of charging two or more rechargeable batteries from a single current source by use of two or more separate charging ports, the batteries being coupled to different respective charging ports, the method comprising, *inter alia*, determining the charging current to be allocated to each

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charging port at least in part on an average current drain during usage of the rechargeable battery coupled to the respective charging port.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is 571-272-2086. If unavailable, contact the Supervisory Patent Examiner Karl Easthom whose telephone number is 571-272-1989. The Technology Center Fax number is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFT

May 2, 2006

Pia Tibbits

Primary Patent Examiner

